<10/068230> Page 1 <02/11/2004>

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     (FILE 'HOME' ENTERED AT 15:39:48 ON 11 FEB 2004)

     FILE 'REGISTRY' ENTERED AT 15:40:23 ON 11 FEB 2004
                E ASFE2/MF
L1              1 S E3
                E ASCR2/MF
L2              1 S E3
                E CR3.9TE2/MF
                E CR4TE2/MF
                E CR3TE2/MF
                E ASFELI/MF
                E LIFEAS/MF
                E FELIP/MF
                E ASCOLI/MF

     FILE 'CAPLUS' ENTERED AT 15:47:01 ON 11 FEB 2004
L3              0 S L1 AND (BATTERY OR ELECTRODE OR ANODE)
L4              0 S L1 AND INTERCALAT####
L5              0 S L2 AND (BATTERY OR ELECTRODE OR ANODE)
L6              0 S L2 AND INTERCALAT####
L7              1 S LIFEP
L8              1 S CU4TE2
L9              1 S LICOAS
L10           264 S CU2SB
L11            11 S L10 AND (ELECTRODE OR ANODE OR BATTER###)

=> s L11 and (phosphorous or arsenide or phosphide)
          16424 PHOSPHOROUS
         176388 ARSENIDE
          68028 PHOSPHIDE
L12           2 L11 AND (PHOSPHOROUS OR ARSENIDE OR PHOSPHIDE)

=> d ibib ab it 1-
YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L12  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         1995:305167  CAPLUS
DOCUMENT NUMBER:          122:60155
TITLE:                    Secondary high-temperature battery and its
                          manufacture
INVENTOR(S):              Coetzer, Johan; Vlok, Isak Louw
PATENT ASSIGNEE(S):       Programme 3 Patent Holdings, Luxembourg
SOURCE:                   PCT Int. Appl., 36 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9423467	A2	19941013	WO 1994-EP1027	19940331
WO 9423467	A3	19941124		
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5368955	A	19941129	US 1994-215844	19940322
ZA 9402048	A	19941003	ZA 1994-2048	19940323
AU 9465642	A1	19941024	AU 1994-65642	19940331
EP 693228	A1	19960124	EP 1994-913511	19940331
EP 693228	B1	19970827		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
JP 08506928	T2	19960723	JP 1994-521680	19940331
AT 157484	E	19970915	AT 1994-913511	19940331
ES 2107210	T3	19971116	ES 1994-913511	19940331
FR 2703513	A1	19941007	FR 1994-3891	19940401
FR 2703513	B1	19950804		
US 5476733	A	19951219	US 1994-344651	19941118

PRIORITY APPLN. INFO.:		
ZA 1993-2406	A	19930402
ZA 1993-2650	A	19930415
ZA 1993-3459	A	19930518
ZA 1993-9121	A	19931206
ZA 1993-1215	A	19931206
US 1994-215844	B1	19940322
WO 1994-EP1027	A	19940331

AB The **battery** has a molten Na **anode** separated by Na ion-conducting solid electrolyte separator from a solid cathode comprising an electronically conductive electrolyte-permeable porous matrix. The matrix is impregnated with a molten salt electrolyte and contains dispersed solid active cathode material. The electrolyte comprises a substantially equimolar mixture of NaCl and AlCl3. The active cathode material comprises ≥1 transition metal selected from Fe, Ni, Cr, Co, Mn, Cu, and Mo. At least 1 additive element selected from As, Bi, Sb, Se, and Te is dispersed in the active cathode material, the atomic ratio of transition metal:additive element being 99:10-30:70. The active cathode material in the charged state of the **battery** is chlorinated.

IT **Batteries**, secondary
(sodium-transition metal chloride high-temperature)

IT 11088-65-6, Copper antimonide (CuSb) 12022-92-3, Iron antimonide (FeSb) 12022-93-4, Iron antimonide (FeSb2) 12035-52-8, Nickel antimonide (NiSb) 12035-53-9, Nickel antimonide (NiSb2) 12054-21-6, Copper antimonide (**Cu2Sb**) 12503-49-0, Nickel antimonide (Ni3Sb) 12503-51-4, Nickel antimonide (Ni5Sb2) 12503-54-7, Nickel antimonide (Ni7Sb3) 27016-75-7, Nickel **arsenide** (NiAs) 160351-69-9
RL: DEV (Device component use); USES (Uses)
(cathode in high-temperature sodium **battery**)

IT 7439-89-6, Iron, uses 7439-96-5, Manganese, uses 7439-98-7, Molybdenum, uses 7440-02-0, Nickel, uses 7440-47-3, Chromium, uses 7440-48-4, Cobalt, uses 7440-50-8, Copper, uses
RL: DEV (Device component use); USES (Uses)
(dispersed additive element-containing transition metal cathode for high-temperature sodium **battery**)

IT 7647-15-6, Sodium bromide, uses 7681-82-5, Sodium iodide, uses 7772-99-8, Tin dichloride, uses
RL: MOA (Modifier or additive use); USES (Uses)
(dopant in cathode compartment of high-temperature sodium **battery**)

IT 7440-36-0, Antimony, uses 7440-38-2, Arsenic, uses 7440-69-9, Bismuth, uses 7782-49-2, Selenium, uses 13494-80-9, Tellurium, uses
RL: MOA (Modifier or additive use); USES (Uses)
(high-temperature sodium **battery** cathode of transition metal containing dispersed)

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:659893 CAPLUS
DOCUMENT NUMBER: 115:259893
TITLE: Method for adding alloying metals and sulfur in low-antimony lead alloy manufacture for lead-acid **batteries**
INVENTOR(S): Feng, Jianzhong; Yang, Wenjie
PATENT ASSIGNEE(S): Shanghai Smeltery, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1047889	A	19901219	CN 1989-103560	19890603
CN 1016621	B	19920513		

PRIORITY APPLN. INFO.: CN 1989-103560 19890603

AB The metals are added to a low-Sb Pb melt as compds., which are desirable to exist in the product alloy, and S is added sealed in freshly prepared Pb crucibles. Cu, Sn, and As are added preferably as **Cu2Sb**, Sn3As2, and SnAs in alloying of the Pb-3% Sb alloy. Alloys prepared by this method have fine grains and are useful as **electrode** grids for Pb-acid **batteries**.

IT Electrodes
(**battery**, lead-acid, grids, low-antimony lead alloy for, microalloying of)

IT 137510-61-3
RL: USES (Uses)
(microalloying of, for **battery electrode** grids)

IT 7440-50-8, Copper, uses and miscellaneous 7704-34-9, Sulfur, uses and miscellaneous 12044-32-5, Tin **arsenide** (SnAs) 12054-21-6

12255-99-1, Tin **arsenide** (Sn3As2)
RL: USES (Uses)
(microalloying with, of low-antimony lead alloys, for **battery** **electrode** grids)